

# **OPERATION MANUAL**

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## **UFM-14DADA**

Digital Audio Distribution Amplifier

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## **UFM-18DADA**

Digital Audio Distribution Amplifier

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1<sup>st</sup> Edition - Rev. 2

# Precautions



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## Important Safety Warnings


### [Power]

 Stop	<b>Do not</b> place or drop heavy or sharp-edged objects on power cord. A damaged cord can cause fire or electrical shock hazards. Regularly check power cord for excessive wear or damage to avoid possible fire / electrical hazards.
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### [Circuitry Access]

 Stop	<b>Do not</b> touch any parts / circuitry with a high heat factor. Capacitors can retain enough electric charge to cause mild to serious shock, even after power is disconnected. Capacitors associated with the power supply are especially hazardous. Avoid contact with any capacitors.
 Hazard	Unit <b>should not</b> be operated or stored with cover, panels, and / or casing removed. Operating unit with circuitry exposed could result in electric shock / fire hazards or unit malfunction.

### [Potential Hazards]

 Caution	If abnormal smells or noises are noticed coming from the unit, turn power off immediately and disconnect power cord to avoid potentially hazardous conditions. If problems similar to above occur, contact authorized service representative <b>before</b> attempting to again operate unit.
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### [Consumables]

 Caution	The consumables used in unit must be replaced periodically. For further details on which parts are consumables and when they should be replaced, refer to the specifications at the end of the Operation Manual. Since the service life of the consumables varies greatly depending on the environment in which they are used, they should be replaced at an early date. For details on replacing the consumables, contact your dealer.
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# Upon Receipt

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## Unpacking

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UFM-14DADA/18DADA units and their accessories are fully inspected and adjusted prior to shipment. Operation can be performed immediately upon completing all required connections and operational settings.

Check your received items against the packing lists below.

ITEM	QTY	REMARKS
UFM-14DADA or UFM-18DADA	1	1 front module 1 rear module
CD-ROM	1	User manual

## Check

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Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

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# 1. Prior to Starting

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## 1-1. Welcome

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Congratulations! By purchasing UFM-14DADA/18DADA Digital Audio Distribution Amplifier you have entered the world of FOR-A and its many innovative products. Thank you for your patronage and we hope you will turn to FOR-A products again and again to satisfy your video and audio needs.

FOR-A provides a wide range of products, from basic support units to complex system controllers, which have been increasingly joined by products for computer video based systems. Whatever your needs, talk to your FOR-A representative. We will do our best to be of continuing service to you.

## 1-2. About the UFM-14DADA/18DADA

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UFM-14DDADA/18ADA AES/EBU format digital audio distribution amplifier is specifically designed for use with FOR-A's Universal Frames UF-106B or UF-112.

Module	Mode	Distribution
UFM-14DADA	Single channel	Input 1 to four outputs
	Dual channel	Input 1 to two outputs Input 2 to two outputs
UFM-18DADA	Single channel	Input 1 to eight outputs
	Dual channel	Input 1 to four outputs Input 2 to three outputs

### Features

- Input signal indication on the front panel
- The internal settings can be modified to set to single channel mode (1 way) or dual channel mode (2 ways)
- Mute data output (48kHz, 24bit) available when no audio signal is present (the following serial number range only)
  - UFM-14DADA: Up to 10770159
  - UFM-18DADA: 10940001-10940008, 10940010-10940020, 10940027-10940036  
10940038-10940040

## 1-3. About This Manual

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This manual is intended to help the user easily operate the UFM-14DADA/18DADA and make full use of its functions during operations. Before connecting or operating your unit, read this operation manual thoroughly to ensure you understand the product. After reading, it is important to keep this manual in a safe place and available for reference.

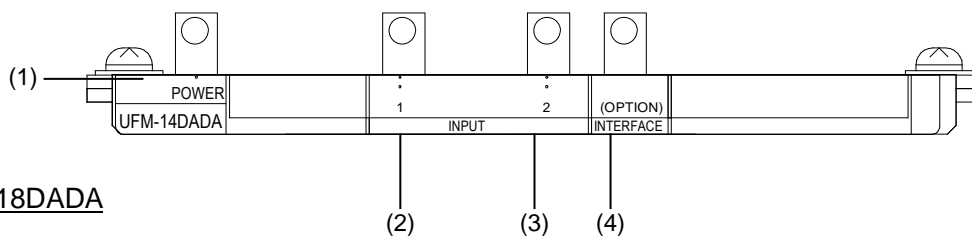
## 2. Panel Descriptions

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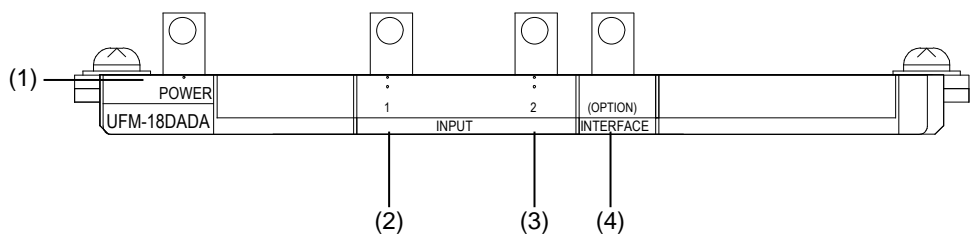
### 2-1. Front Panel

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#### UFM-14DADA



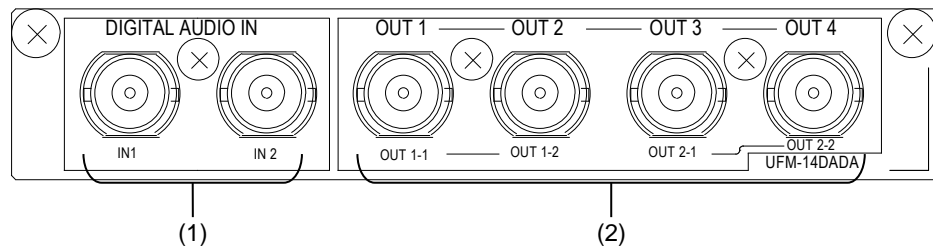
#### UFM-18DADA



(1)	Power indicator	The power indicator is lit whenever the supply circuit on the board is operating properly.
(2)	INPUT 1	This indicator lights whenever the proper digital audio signal is input to IN 1.
(3)	INPUT 2	This indicator lights whenever the proper digital audio signal is input to IN 2.
(4)	INTERFACE	Not used.

## 2-2. Rear Panel

UFM-14DADA



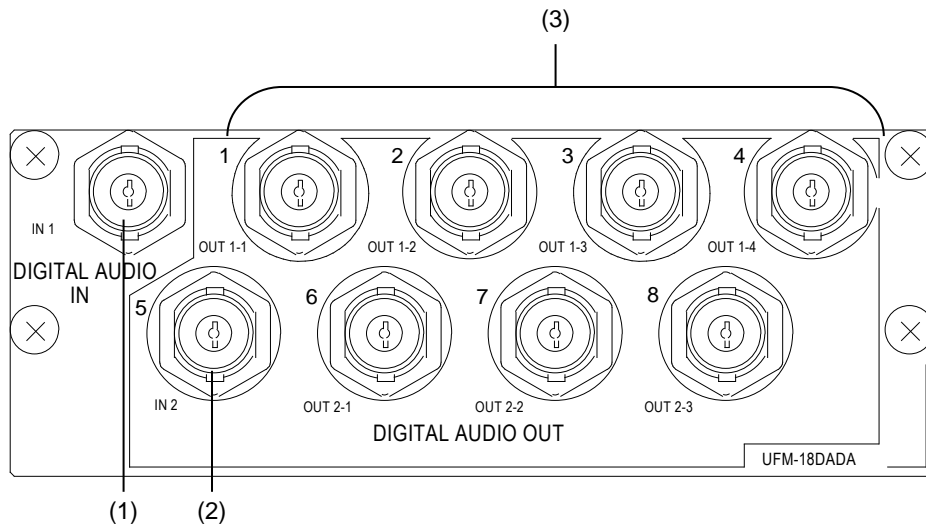
### ◆ Single channel mode

(1)	DIGITAL AUDIO IN IN 1 IN 2	Used for digital audio input connection. IN 1 is used to input digital audio signals. IN 2 is not used.
(2)	OUT 1 OUT 2 OUT 3 OUT 4	Used for digital audio output connection. Digital audio signals input to IN 1 are output from OUT 1, OUT 2, OUT 3, and OUT 4 (one input to four outputs).

### ◆ Dual channel mode

(1)	DIGITAL AUDIO IN IN 1 IN 2	Used for digital audio input connection. IN 1 and IN 2 are used to input digital audio signals.
(2)	OUT 1-1 OUT 1-2 OUT 2-1 OUT 2-2	Used for digital audio output connection. Digital audio signals input to IN 1 are output from OUT1-1 and OUT1-2 (one input to two outputs). Digital audio signals input to IN 2 are output from OUT2-1 and OUT2-2 (one input to two outputs).

## UFM-18DADA



### ◆ Single channel mode

(1)	DIGITAL AUDIO IN IN 1	Used for digital audio input connection.
(3)	DIGITAL AUDIO OUT 1 – 8	Used for digital audio output connection. Digital audio signals input to IN 1 are output from DIGITAL AUDIO OUT 1 – 8 (one input to eight outputs).

### ◆ Dual channel mode

(1)	DIGITAL AUDIO IN IN 1	Used for digital audio input connection.
(2)	IN 2	Used for digital audio input connection in dual channel mode.
(3)	OUT 1-1 OUT 1-2 OUT 1-3 OUT 1-4 OUT 2-1 OUT 2-2 OUT 2-3	Used for digital audio output connection. Digital audio signals input to IN 1 are output from OUT1-1, OUT1-2, OUT1-3, and OUT1-4 (one input to four outputs). Digital audio signals input to IN 2 are output from OUT2-1, OUT2-2 and OUT2-3 (one input to three outputs).

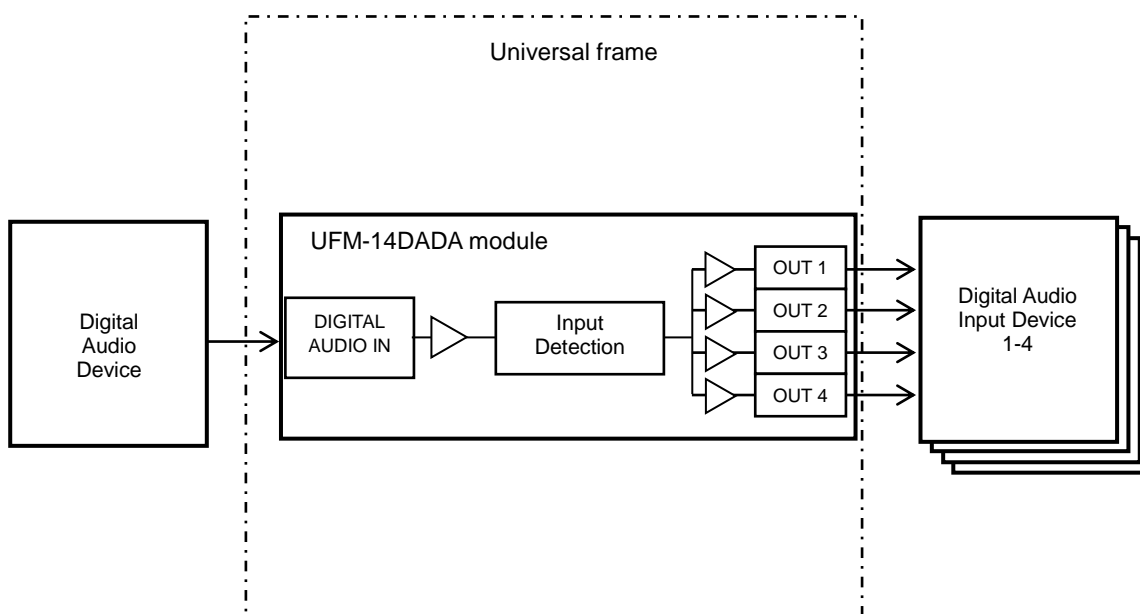


### 3. Connection

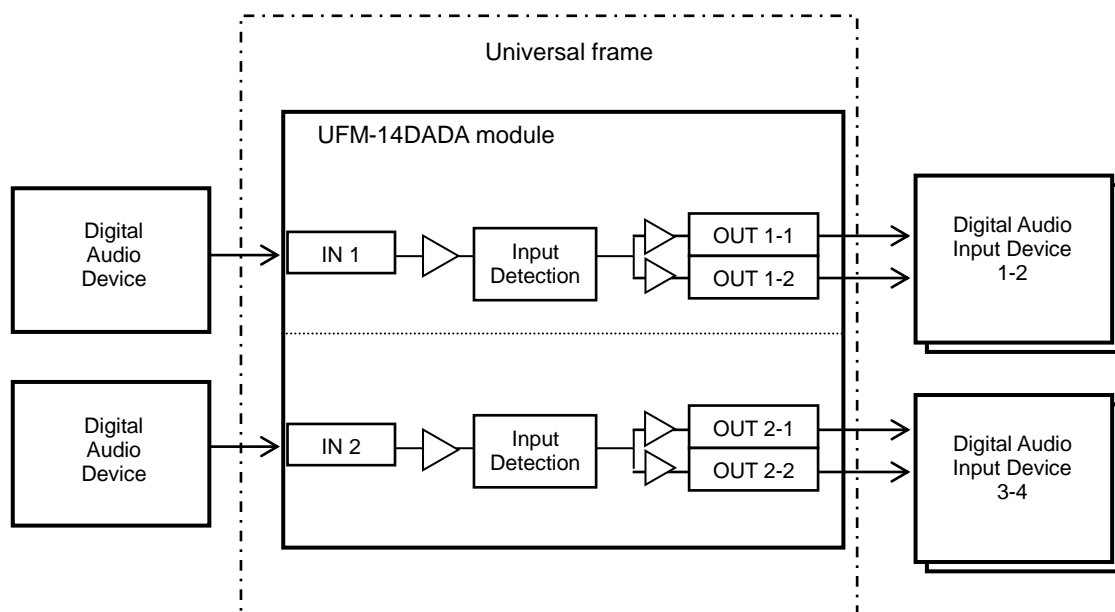
Refer to figure below for connecting the UFM-14DADA/18DADA to other devices.  
Note that before installing the UFM-14DADA/18DADA into the universal frame, you should thoroughly read the operation manual for the Universal Frame where you will be installing.

#### UFM-14DADA

(1) Single channel mode (one input to four outputs)

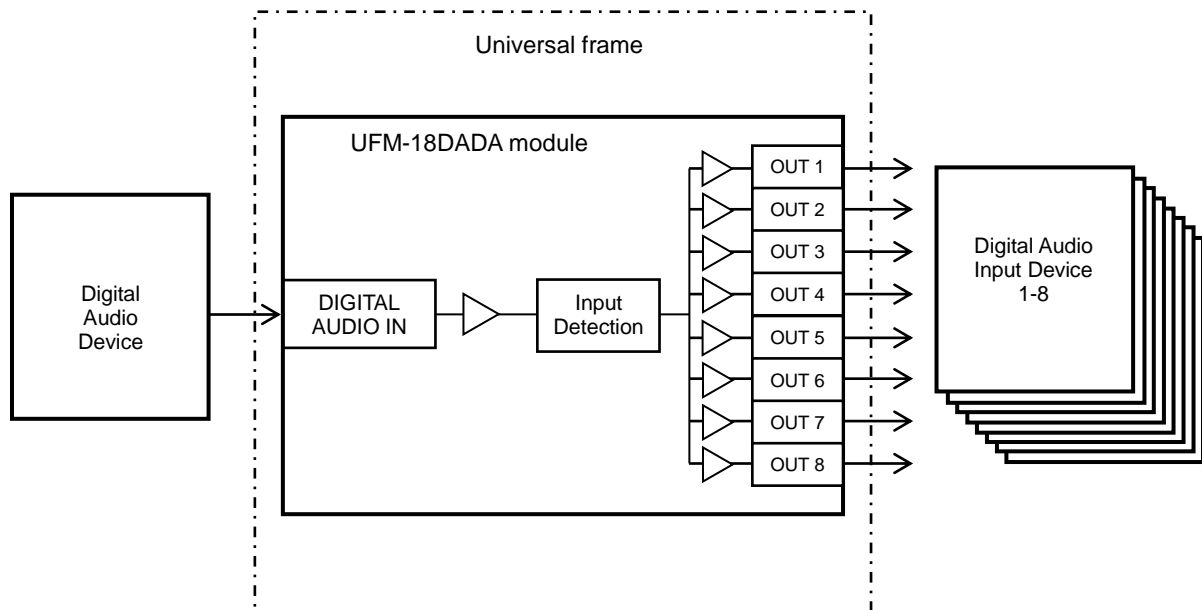


(2) Dual channel mode (one input to two outputs in two ways)

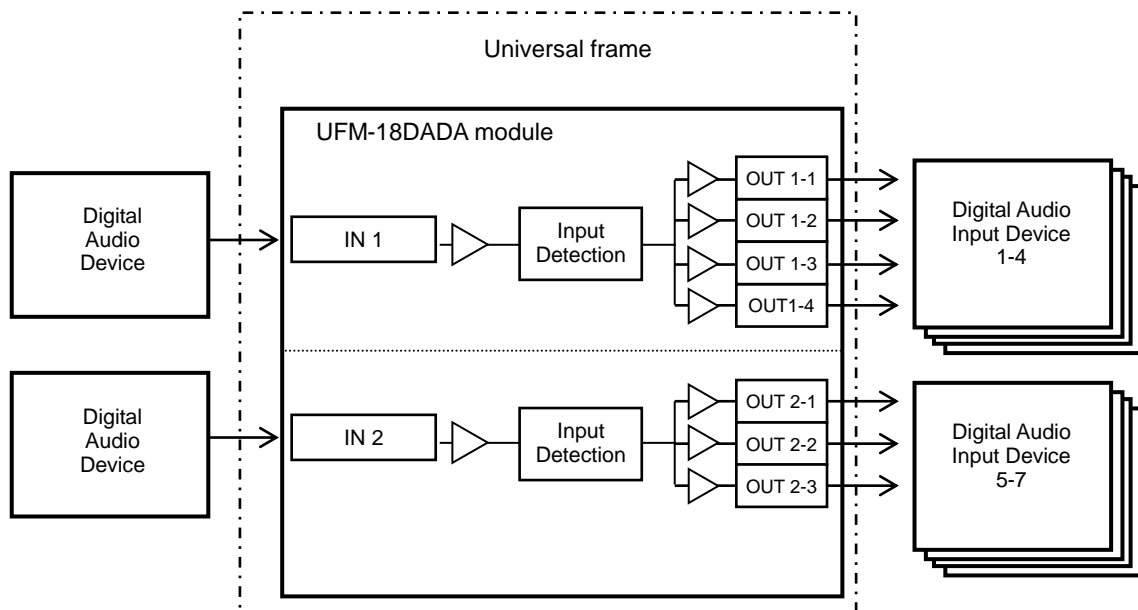


## UFM-18DADA

(1) Single channel mode (one input to eight outputs)

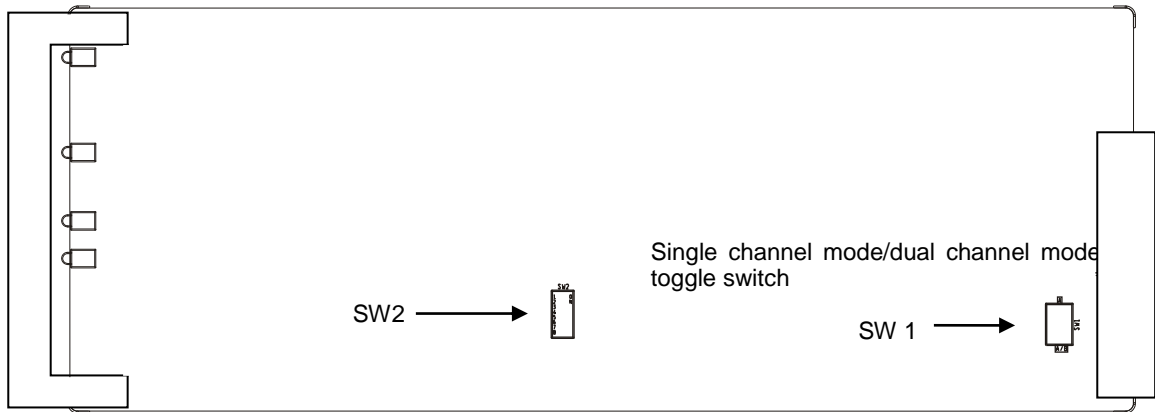


(2) Dual channel mode (one input to four outputs and one input to three outputs)



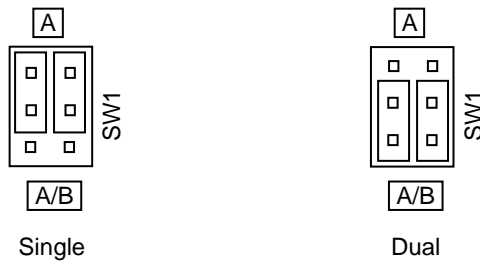
# 4. Internal Settings

The following settings can be made via the front module of the UFM-14DADA/18DADA. Switch settings must be made prior to installing any module to the universal frame.



## 4-1. Operation Mode (SW1)

SW1 is used to select between single channel mode (one way) and dual channel mode (two ways).

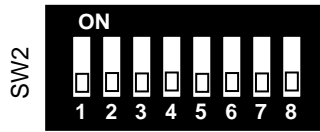


Jumper Setting	Operation Mode
<b>A</b> position	Single channel mode
<b>A/B</b> position	Dual channel mode

Factory default setting is single channel mode (**A** position).

## 4-2. Other Settings (SW2)

SW2 is for maintenance use only. If these settings are changed by mistake, refer to the table below to return them to the default settings.



Switch No.	Factory Default	Description
1	OFF	For maintenance use only. Do not change this setting.
2	OFF	For maintenance use only. Do not change this setting.
3	OFF	For maintenance use only. Do not change this setting.
4	OFF	For maintenance use only. Do not change this setting.
5	OFF	For maintenance use only. Do not change this setting.
6	OFF	For maintenance use only. Do not change this setting.
7	OFF	For maintenance use only. Do not change this setting.
8	OFF	For maintenance use only. Do not change this setting.

## 5. Specifications and Dimensions

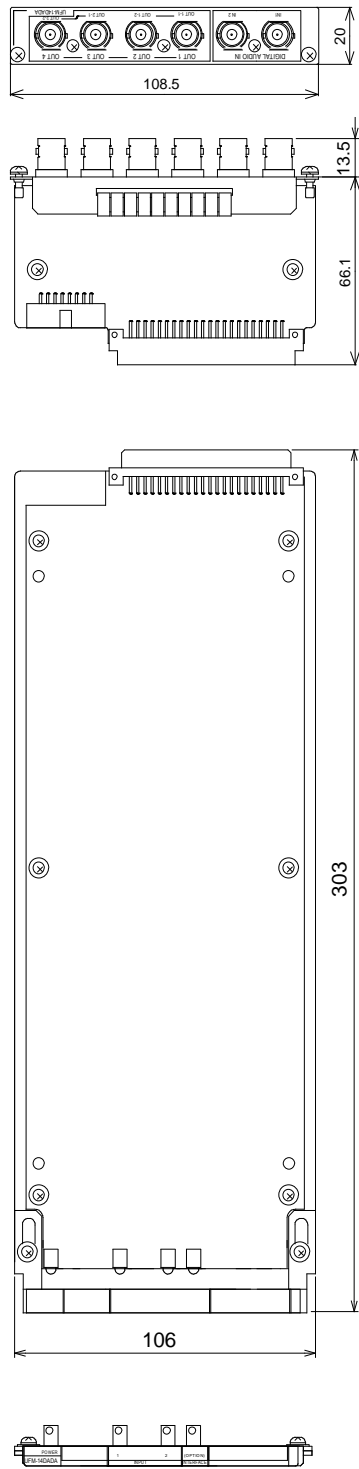
### 5-1. Specifications

	UFM-14DADA	UFM-18DADA
Distribution		
Single channel mode	Input 1 to four outputs	Input 1 to eight outputs
Dual channel mode	Input 1 to two outputs Input 2 to two outputs	Input 1 to four outputs Input 2 to three outputs
Audio input	Digital audio 1.0V(p-p) 75Ω BNC	
Audio output	Digital audio 1.0V(p-p) 75Ω BNC	
Digital Audio Format	AES/EBU	
Sampling Frequency	32kHz – 96kHz	
Temperature	10°C – 40°C	
Humidity	30% – 90% (no condensation)	
Power Source	+ 12VDC to + 24VDC (supplied with universal frame)	
Power Consumption	Approx.150mA	Approx.160mA
Weight	Approx. 0.5 kg	
Dimensions	106 (W) x 303 (D)mm	
Front module		
Rear module	108.5 (W) x 20 (H) x 66.1(D)mm	108.5 (W) x 40.6 (H) x 66.1(D)mm
Required slot	1 slot	2 slots
Consumables	No consumables are used in these products.	

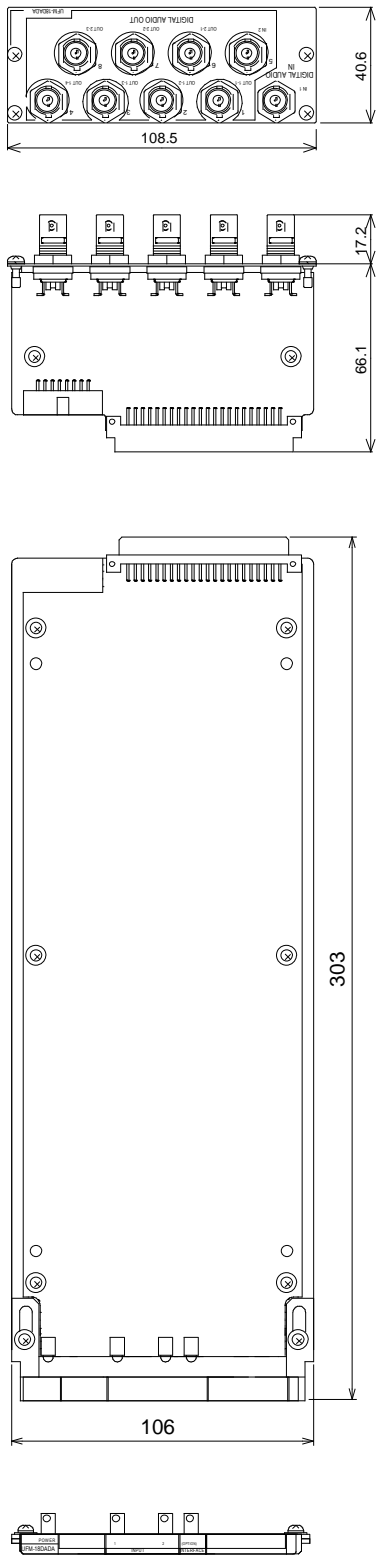
# 5-2. Dimensions

(All dimensions in mm.)

UFM-14DADA



UFM-18DADA



## **Warning**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.



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